

Notice of Allowability

Application No.

10/814,695

Examiner

Melanie Yu

Applicant(s)

KOO ET AL.

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1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7 August 2007.
2. ☒ The allowed claim(s) is/are 1-6, 8-13 and 47-56 (renumbered 1-22, respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☒ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 7/10
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. A substitute oath with a signature for each inventors named in the application must be submitted.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance: The prior art fails to teach a method for producing a cluster of surface modified metallic colloid wherein the metallic colloids are prepared by the recited method and have an attached Raman-enhancing organic molecule that has a moiety with an affinity for the metallic colloid and another moiety with an affinity for a molecule. Kidwell et al. (US 5,384,265) teach a method for producing a cluster of surface modified metallic colloid comprising preparing a solution comprising cations of the metal and a reducing agent by dissolving the cations and the reducing agent in the solution and subsequently heating the solution to produce the metallic colloid, but fail to teach a Raman-enhancing organic molecule that has a moiety with affinity for the metallic colloid and another moiety with an affinity for a biomolecule. McCormick, III et al. (US 2003/0199653) teach a metallic colloid with a cystamine organic molecule attached, which according to the instant specification is a Raman-enhancing organic molecule that has a moiety with an affinity for the metallic colloid and another moiety with an affinity for a biomolecule, but fail to teach the method of producing the metallic colloid as recited by the instant claims. It would not have been obvious to one having ordinary skill in the art to combine these two references because the instant specification teaches that particles made by the recited method provides over 50% greater Raman enhancement than the method taught in the prior art of McCormick, which is boiling a silver nitrate and titrating with a sodium citrate solution. Therefore, the method of producing metallic colloids as recited by the instant claims produces unexpected results not found in the prior art, and it would not have been obvious to produce the metallic colloids of

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McCormick with the method taught by Kidwell. Furthermore, Kidwell fails to teach aggregation of metallic colloids to form a cluster of surface modified metallic colloids.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

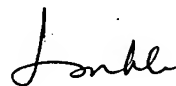
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Yu whose telephone number is (571) 272-2933. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Melanie Yu
Patent Examiner
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